



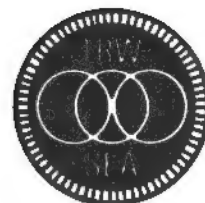
# CROSSTALK

THE MONTHLY NEWSLETTER OF THE TRW/ARC

MEMBER ARRL CLUB NUMBER 1658

\*\* FD71 \*\* FD73 \*\* FD75 \*\* FD76 \*\* WAS \*\* WAC \*\*

GARRETT/W6TRW REPEATER: 145.32/-6 (PL 2A) UHF: 442.000 IN/447.000 OUT



## CALENDAR FOR MARCH AND APRIL

Friday Every Friday Club Breakfast in Bldg S Cafeteria any time after 7 am.  
Wednesday Every Wednesday Emergency Communications Team Check-in. Noon  
on 145.32. Anyone can report in  
Saturday March 26 8-11 am Swap Meet at northwest corner of Compton/Marine  
and Aviation behind the Chevron station.  
Tuesday March 29 Noon Club Meeting, R10/2778 Everyone is Welcome!!  
Thursday April 7 after work Executive Board Meeting 5107 El Segundo Blvd at  
Oceangate. All members are welcome.  
Tues-Thurs April 12-14 Noon Earthquake Expo. Members needed to help out at  
TRW/ARC booth. Contact Rich Sauer for Info.  
Tuesday April 26 Noon Club Meeting, R10/2778  
April 29, 30 and May 1 Dayton's Hamvention Deadline for reservations is April 4  
Saturday April 30 8-11 am Swap Meet at northwest corner of Compton/Marine  
and Aviation behind Chevron station.

## Check the Calls

by Bill Dews K6AND

Check the call signs listed below. If you find your call, you have NOT paid your club dues for 1988. Better yet, look for your 1988 Club Membership card. If you do not have it, please fill out one of the three applications that are attached to the last three Crosstalks and write a check to the TRW/ARC. We don't want you to miss out getting the Crosstalk, so get busy.

WA4TTG; KH6UR; WA1ZQR; WA6KPC; BEDDYAN,  
JOHN; N6PLU; WA6PAS; N6PAN; N4ARD;  
WB6RLN; FEDOR, JEFF; K6GZF; WA5QJQ;  
N6OAT; WD6BNR; W6IZK; WB7DUD; WA6FLL;  
KB8AY; NU6U; MOUNT, LISA; KA6NDN; K6UG;  
N6CRR; KB6DXI; WA6AJC; WA6TYN; K6RGW;  
KH6JKY; KE6PI; WB6UYX; W6CQ; K6RT;  
KG6JP; W6TUH; KA6KKU; N6NDLF (sic);  
WD6FPU; W06X.

(Ed. Note: Where a name is listed, no call sign was given)

Please get the applications to Bill Dews immediately. The address is listed on the back of this news letter. Thank you.

## From the Library

By George Lee N6IQH

**QST:** Phase Noise and it's Effects on Amateur Comm. Part 1; The Cordless Phone Link; Traps for UHF Interference; Xmtg Loops Revisited

**HR:** High Dynamic Range Mixing with the Si 8901 (IP+37dBm); The IC-781, Icom's Newest Xcvr; Optimizing Gain in Yagi Ant; Homebrewing Equipment from Parts to Metal Work; Automatically Switched 1/2 Octave Filter Part 2; Freq Cal Using 60 Hz WWVB; Amateur Packet Networking Part 2

**CR:** Review of Complete Line of MFJ's Audio Filters and Kenwood TH-25AT; Cable TV Coax and hardline.

**Z3:** 2m Aboard the Minnebiko (EKK have you read this?); The 10 meter Beam for \$4 (using junk TV antenna); Reviews of Create X-209 9 ele 2m Yagi (14 dB), Larsen HT Ant, WDE NP-272 DX Docking Booster. Com-Rad CR 2/4A Dual-Band Ant, Cushcraft 124 WB and Tonna 20804 4-ele 2m Yagis, Datong DF Package, and Maxcom Auto Ant Matches.

The Hf bands are gradually opening up. If you want to replace your homebrew antenna, there are 4 books in the shack that might help.  
Happy DX-ings!



## **QSL Cards by Bill Schreck KE6LB**

During the March 2 TRW/ARC Executive Board Meeting (EBM), I suggested that the price of the TRW/ARC blank QSL cards be reduced from 3 cents each to 1 cent each. The purpose being to encourage more of our club members to start using the cards. In addition to mailing out cards based on amateur radio contacts, cards could be passed out to amateur radio friends at ARRL conventions and similar events, much like we hand out business cards. TRW/ARC has an associate member, Mike, W6UND, who has a printing business and who does QSL card overprinting. I will bring some of his examples to the next TRW/ARC meeting. The EBM did approve the 1 cent price, so call Mel Erb, our QSL card manager, to purchase some.

## **Repeater Courtesy**

This article is reprinted from the Hughes El Segundo Amateur Radio Club Bulletin.

Here are a few suggestions which should allow more persons to join into a QSO more easily, and which should improve our communications more efficiently. Some are common courtesy; some are common sense.

1. Break with your call, NOT with "BREAK" unless it is an emergency.
2. Listen around to know who is in QSO before breaking. Then you will know who to turn it over to.
3. When someone breaks, turn it over to that person right away. Do not just acknowledge that they are there. They may have an emergency or information of immediate concern.
4. Always turn it over to a specific station. Don't throw it up in the air. (See 2, above)
5. When already in QSO, when it is turned to you, leave room for someone to break.
6. It is not necessary to call the roll with everyone's call each time you turn it over to someone. It is not even necessary to give their call.
7. You only need to give your call every 10 minutes during a QSO, not every time you turn it over.

## **TRW Earthquake Expo Needs You!**

**By Rich Sauer N6CIZ**

As reported in last month's issue of Crosstalk, the TRW/ARC has been invited to participate in the 1988 TRW Earthquake Expo to be held on April 12th and 13th at the Building S patio and April 14th at the Building R6 patio.

The Expo will feature exhibitors that play critical roles in earthquake preparedness and recovery. As TRW prepares it's emergency plans, the company is beginning to recognize the important role being played by the (con next column)

Amateur Radio Club. This Expo is a great opportunity for us to impress on the company and it's employees that Hams are there in times of need and that we have capabilities that other agencies do not. Exact details need to be worked out, but I would like to see as complete a setup as possible (radios, packet, etc.). Of course, some BIG signs and information flyers on Ham Radio, the TRW/ARC and DCS/RACES. If you have any ideas or would like to help in this area, let me know.

One thing we'll definitely need is people to man the booth. The Expos will take place each day from 11:00am to 1:30pm. So, including set-up and tear-down time, we're looking at three and a half hours a day (10:30 to 2:00) when we will need coverage. We need to have as many people on hand as possible throughout the time period. If you can help, please call me and let me know what hours you can be available.

Let's get together to set up a really first-class operation. Again, call me if you have any ideas and if you can help out for an hour or so on any of the above dates.

## **QSL Card Day**

**by Bill Montgomery N6MEL**

On April 15th, we will be having a QSL "eyeball QSO" card exchange at the Friday morning breakfast. Please try to have breakfast with the Club at the TRW Bldg S Cafeteria on this day, 7:00-8:30 am, and bring a dozen or so of your QSL cards to exchange.

If you don't have any QSL cards, picture postcards will do. John, N6JLS, has a unique way of making his own personal cards with stick on call sign and name and address labels. (Samco Stick-ons and I will have order sheets for those interested -- JLS).

**WANTED:** HF Transceiver for blind ham, Swan 350 or similar with adjustable bandspread. Contact Bob Williams, WB6ZAK, RS/2291, X57729 or home 377-1283.

**TOWER FOR SALE:** 5-section, free-standing, 50 foot tower. From the estate of Fred Reed, W6UMC. Must be dismantled and removed by buyer. \$200. Please call Mrs. Olive Reed in Monterey Park -- (213) 261-7951.

**Congratulations** to Herb Gleed, W6FQ, one of our retired Club members, whom has been given the QCWA President's Award for his 20 years of service as net control of the Sunday morning QCWA National Band Net. The award was announced in the in the January issue of World Radio.

**New FCC Address:** The FCC has moved their Long Beach office. The new address is:

FCC  
Cerritos Office Bldg  
18000 Studebaker Rd Room 660  
Cerritos CA 90701

### **Emergency Communications News** **By Rich Sauer N6CIZ**

Well, as most of you know, some major changes are taking place at TRW. People (good friends) who have been with the company for some time are finding themselves without a job. And this is havin' an effect on the Emergency Communications Team.

Let me run down the list of what's been happening:

**ECT Membership Requests:** I've spent a lot of space here asking for volunteers to contact me for information on joining the ECT and a lot of you have done just that! Thank you. I haven't forgotten about you, either. However, it seems that even though some people have been layed off, the work that were doing goes on. And it falls to those of us who are still hanging on to pick up the workload. Bottom line: I've been busy!!! This is really a crazy situation. But I promise to contact all of you and let you know what's been going on. Honest. Trust me.

**Property Passes:** The folks at Security are still supporting us and passes will be coming down the pike. However, right now they've got some other priorities that need to be taken care of and we've been placed on the "back burner" for the time being. Don't worry -- they haven't forgotten us.

**Wednesday Checkins:** Get on the repeater every Wednesday at noon. The net runs from 1200 to 1215 hours. You don't have to be a member of the ECT or the Club or TRW or anything else. Just get on and report : 1) Your Call; 2) Your Location 3) Your Current Equipment Capability. It couldn't be easier. By the way, I also try to start the net with some messages about what is happening in the Club, so tune in and check in.

**DCS/RACES:** A bunch of us are members of the Disaster Communications Service (DCS) which runs RACES (Radio Amateur Civil Emergency Service) in LA County. It is a good thing to do and all ECT members are encouraged to join up. For more information, contact me.

**Kudos:** I'd like to thank Bill Dews, K6AMD, who came out to the swapmeet last month and set up a table to pass out RACES information and applications to folks. Also, thanks to John Keller, N6JLS, who printed up some nifty signs. The effort that Bill and John went through is really appreciated.

**More Kudos:** This doesn't exactly fall under "Emergency Communications" but I want to take some space here to thank George Lee, W6IDW. George contacted me during one of our noontime nets with a great idea. Not only that, he followed up on it. (CON)

George got hold of the new ARRL video tape and made a copy of it which the Amateur Radio Club presented to the TRW Video Club. Now Video Club members can borrow "The New World of Amateur Radio" and find out what Ham Radio is all about.

**More Kudos (Part II):** Thanks to all of you who've checked in to the nets, who've joined and supported RACES, who've called to offer their help and encouragement. Things are moving (although sometimes at glacier-like speed) and I think that great things are ahead for us all.

### **Book Review by Paul Lukas N6DMV**

Encouraged by the announcement of the Feb. issue of Crosstalk, I went up to the shack and checked out W2FMI's "Transmission Line Transformers" by ARRL. The book is very well written and, although it has some math, even without the number-crunching one can design baluns, matching networks, etc. because of the numerous charts, data tables and photos included. The book is written with the practical ham in mind. The last chapter is devoted to instrument construction, showing you how to build your own test equipment. Check out the book to find out how to build a balun with only a 40 mdB (yes, 40 millidecibel!!!) loss!! The book sells for \$10.00.

"Radio System Design for Telecommunications (1-100 GHz)" by Roger Freeman, is another new book in the TRW Tech. Library. The book is primarily for people who are in the UHF/UHF business and want to seriously pursue the subject. The book is VERY TECHNICAL and is full of heavy math, but even if you bypass these parts, a wealth of information is available for designing comm. paths. Do you know what the difference is between a "power QSB" and a "K-factor QSB"? Even if you UHF whiz- kids know the answer right-off-the bat, it is worth a look through the pages. You UHF fans, do you know where the 1st Fresnel zone of your comm path is and how to determine it's radius? If you were trying to set up a comm path at UHF frequencies, what method would you use to plot the path profile -- the "fully linear method" or the "curvature method"? How about the "4/3 earth method"? The book is full worked-out examples, and don't worry about the math. You cannot help learning something just by reading the titles!!

### **Field-Day 1988** **by Bill Schrecengost KE6LB**

It is time again to start planning for the Annual Mid-year ARRL Field Day. Based on past Field-Days and the talent we have in our club, I think we will shoot for operating class 7A again (ie, operation of 7 separate radio stations/bands simultaneously). We did well last year considering we lost our best point producing station (40m CW) in the middle of the night when a wild 4WD vehicle drove through our FD site at 3 am and knocking the 40m antenna down. (con)

The vehicle narrowly missed several tents occupied by radio operators. To reduce the chance of this occurring again this year we will have infrared motion detector spotlights which will turn on if anything enters our FD site during the night. To better serve our FD food service, we have purchased 2 six-foot folding tables. We still need a good wind-resistant dinner fly to set up over our new tables. The frame and upright for this fly must be strong and easy to put together. Also, we need a 30-40 foot push up mast. If anyone has suggestions of where to get the above "want" items, please contact me (K63316).

Like the US Marine Corps, I would like to put out a call for a few good men and women to help at the 1988 Field Day. There are lots of fun tasks, so fill out the following mini-form and mail it to me.

Thanks.

### 1988 ARRL FIELD DAY

Field-Day setup (Fri eve/Sat am)

- ( ) Bldg 65 FD Equip Loading
- ( ) Antenna Installation
- ( ) Tent Setup
- ( ) AC Power Distribution
- ( ) Run Errands

Field-Day Tear Down (Sun 11am-1pm)

- ( ) Antenna Teardown
- ( ) Tent Teardown
- ( ) Bldg 65 FD Equipment Storage

Food Service

- ( ) Sat Lunch
- ( ) Sat Dinner
- ( ) Sun Breakfast

Communications Tasks

Band	Operator	Logger
15 M CW	( )	( )
15 M SSB	( )	( )
20 M CW	( )	( )
20 M SSB	( )	( )
40 M CW	( )	( )
40 M SSB	( )	( )
80 M CW	( )	( )
80 M SSB	( )	( )
2 M FM/SSB	( )	( )
UHF FM	( )	( )
PACKET	( )	( )

Mail completed form to: Bill Schrecengost  
M4/2315

### Executive Board Meeting

by Chris Wachs HA2KOL

The March EBM was called to order by John Keller on March 3 at 17:40.

John Keller reviewed the impact to the Club of TRW's layoffs. He will be able to run the Club until April. A special election will be held during the April general membership meeting to fill his position. John reported that Bill Dews will videotape the Dayton Hamvention and will present the video at the May general meeting. Chris Wachs reported to John that he will look into having the repeater carry the Phase III-C launch audio. Results will be reported at the next board meeting. John made a motion to accept the 1988 budget as amended. The motion passed.

Rich Sauer reported that he sent (Con)

in the TASMA inputs on the 2-meter repeater. He also announced that he is resigning as technical chairman but he will fill the position until a replacement is found. Rich reported that TRW donated a copy of the ARRL World of Amateur Radio video to the TRW Video Club tape library. He reported on the TRW earthquake expo (see related article). The club will have a table at the expo. Anyone interested in helping, please contact Rich.

Rich also reported that the February swapmeet went well. 210 total spaces have been sold. 100 new spaces were sold. The attendees are commenting favorably on the new swapmeet format.

Dave Stockwell presented the 1988 TRW/ARC budget. The budget was accepted as amended.

Chris Wachs reported that he will check the availability of the room for general meetings.

A proposal to decrease the price of club QSL cards was made. A new price of one cent per card was approved.

David Kropp requested the club purchase Personal Newsletter software at a cost of \$47.95. The request was approved.

Bill Dews reported club membership at 204. He also reminded everyone to renew their membership.

Steve Ng reported on the March LAOARC meeting. He reported that the 1988 South-western ARRL Hamvention will be held at the Disneyland Hotel over Labor Day weekend. Steve also reported that the Association of North American Radio Clubs will hold its convention on July 13-16 at the Holiday Inn in Irvine.

Bill Schrecengost reported that the club purchased two tables for use at FD. He is still looking for lights and a mast as previously reported in the February Crosstalk. He reported that WD6DBD will assist as field day co-chairman.

Jim Mike reminded everyone to attend the Club's St. Patrick's Day festivities on Friday, March 18. He reported that the Club is still looking for a picnic chairman. It was suggested that from month to month the position be rotated between different people. This approach will be tried.

Under old business, Terry Thompson presented the results of the Computer Price Survey. After the presentation, John Keller made a motion for the club to spend not in excess of \$3000.00 for a personal computer (AT class) and accessories including a packet radio controller and software with the final configuration to be determined by Terry Thompson, Chris Wachs, and Rich Sauer. The motion passed after some discussion. The meeting was adjourned at 19:08.

**For Sale:** Yaesu FT-270RH, 2m mobile, 1 year old, w/encode/decode, voice installed, operating manual. \$350.00/obo  
Astron 20 amp power source, 6 months old. \$65.00

Kenwood SW-100B SWR/pwr meter \$35.00  
Contact David Kropp, N6PLU, at 375-9944, or on the repeater.



## **From the President**

**by John Keller N6JLS**

The present employment conditions at TRW have affected the Club in a very direct way. Bill Doheney, AA6GI, whom I welcomed as Training Chairman last month was laid off and can no longer fill that position. I have also been put on lay off notice and will only be employed at TRW until 4/22/88. If I do not find a position at TRW (and the chances of that are slim and none, and Slim doesn't work here either) then at the April Club meeting (Tuesday, April 26) there will be a special election to fill the office of President. You might think about who you would want in the position between now and then.

So, now the Club is in need of filling two Staff positions. We need a Training Chairman and Activities Manager. The Activities Manager organizes the Club meeting door prizes, the Club Picnics and the St. Patrick's Day Observance. If we cannot find an Activities Manager soon, we will have no choice but to cancel the Club Picnics.

Thanks to Randy McKecknie, N6ZNS, for volunteering to work the booth during the "1988 TRW Earthquake Expo" to be held April 12, 13, 14. The effort will consist of manning a booth during the lunch hour for those three days, answering questions, operating hand-helds, operating Packet and possibly HF. We can definitely use more help so if you would like to assist in this effort, please contact John Keller at (53)52527.

I still want to urge TRW/ARC members with 2 meter hand-held capability to join RACES, ARES and the TRW/ARC Emergency Communications Team. Contact Rich Sauer at (53)58008 and he will take care of you.

I have made the decision that if I no longer work at TRW by Field Day, then I will support the TRW/ARC this year, but it will be my last. So, if you want to take part in the fantastic pancake breakfast that I cook up on Sunday morning then you had better be ready to put some effort into helping out this Field Day, because only the those helping will get fed and this will be your last chance to enjoy this sumptuous feast. I hope that many of you will be able to join in as we really have a lot of fun.

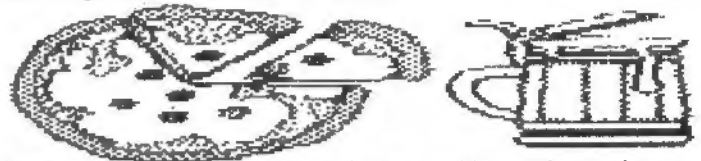
## **Famous Hams**

The following list appeared in W6SD Carrier, San Fernando Valley ARC and was compiled by Katherine, WA6FAH.

5CY	Howard Hughes
A4XAA	Sultan of Oman
EA1JC	King Juan Carlos of Spain
H18MMJ	Manny Mota -- LA Dodgers
JY1	King Hussein of Jordan
UU2RG	Rajiv Gandhi -- PM of India
WA4CZD	Chet Atkins -- Entertainer
W5LFL	Owen Garriot -- Astronaut
W6EZV	General Curtis Le May
KB6LOR	Dick Rutan -- Voyager Pilot
KB6LGS	Jean Yeager -- Voyager Pilot
F08GQ	Marlon Brando -- Actor
KA7EUD	Donnie Osmond -- Entertainer

## **St. Patrick's Day Celebration**

March 18 marked the date of the Club's annual St. Patrick's Day celebration, which was held, as usual, at the Shakey's Pizza Parlor on Torrance Blvd in Torrance. Everyone in attendance had a great time eating pizza and drinking beer and sodas. (This software package comes with graphics, wanta see?)



There was a slight debate with the place about the amount of the discount that we were suppose to get, but it was all worked out, although I know that I forgot to check if I got the discount or not.

Rich brought one of the satellite photographs that are on sale in Bldg. 8, LA from 400 miles up, and a lot of us had fun trying to find where we lived.

All in all, Chris Wachs and David Kropp estimated, by guess and rough count, that there were 30-40 people there. John Keller wanted to know if we had all the names down to put in the paper. No, we didn't even try.

Unfortunately, the author left at around 7:00 pm, so what time the whole thing broke up is not known to anyone but hose who were there. If you want to find out what time these things normally break up, plan on going next year. There is always a good time to be had by all.

## **Tidbits**

**by David Kropp N6PLU**

John, K6MAU, comes by my work QTH in Del Amo Mall every now and again, and last month told me a story to put in the paper. It seems that John came home one day to find his 2 meter antenna had broken free and was hanging by it's coax at the top of his 50 foot tower (or is it 60 ft?). Not being able to climb it himself, John was able to find Bill, AA6GI, on the air and talked him into coming over and climbing the tower. To be honest, Bill was more than happy to do the favor, and came over and rescued John's antenna. According to John, the antenna was brought down, so my question is did it ever get back up?

I want to thank the Club for buying me this software package. It is called "Personal Newsletter" and is put out by Softsync. I was getting rather tired of cut-and-paste assembly of this newsletter, and the Appleworks program I was using did not allow for columns. With this, I could, if I wanted to, put up to nine columns on a page. I will stick with two. It also has graphics, as I demonstrated above, and I will try to use these, sparingly, where they are relevant or where they will bring a little life to the newsletter. I am going to be experimenting with some of the available fonts to see which is most easily read. For this month. 73.